



Travel to High Altitudes

The low oxygen levels found at high altitudes can cause problems for travelers who are going to destinations higher than 8,000 feet above sea level. The best way to avoid getting sick is to ascend gradually, but if you have to ascend quickly, medicines are available to prevent altitude illness.

Ascend Gradually

If you plan to travel to a higher altitude and sleep there, you can get sick if you don't ascend gradually:

- Do not go from a low altitude to sleeping at higher than 9,000 feet above sea level in one day. Instead, spend a few days at 8,000–9,000 feet before proceeding to a higher altitude to give your body time to adjust to the low oxygen levels.
- Once you are above 9,000 feet, increase your sleeping altitude by no more than 1,600 feet per day. For every 3,300 feet you ascend, try to spend a day without ascending further.
- Do not drink alcohol or do heavy exercise for at least the first 48 hours after you arrive at an altitude above 8,000 feet.
- As an alternative, consider taking a day trip to a higher altitude. It's less risky to take a day trip to a higher altitude and then return to a lower altitude to sleep.



Sometimes your itinerary may not allow gradual ascent. If this is the case, talk to your doctor about prescribing a medicine to prevent altitude illness. You should also be familiar with the symptoms of altitude illness so that you can take steps to prevent it from becoming more severe. Many high-altitude destinations are remote and lack access to medical care, so preventing altitude illness is better than getting sick and needing emergency treatment.

Altitude Illness

The symptoms of altitude illness are similar to those of a hangover: headache, feeling tired, lack of appetite, nausea, and vomiting. Children who cannot yet talk may just seem fussy. Mild cases can be treated according to symptoms (such as with painkillers for a headache) and should go away on their own within a few days. Medicines are available to shorten the time it takes to get used to high altitude. However, people with altitude illness should not continue to ascend until they have gotten used to the altitude. **Critically, a person whose symptoms are getting worse while resting at the same altitude must descend or risk serious illness or death.**



One severe consequence of altitude illness is swelling of the brain (high-altitude cerebral edema [HACE]). Symptoms include extreme fatigue, drowsiness, confusion, and loss of coordination. HACE is rare, but it can be fatal. If it develops, the person must immediately descend to a lower altitude.

Swelling of the lungs (high-altitude pulmonary edema [HAPE]) is another severe consequence of altitude illness. Symptoms include being out of breath, weakness, and cough. A person with HAPE should also descend and may need oxygen.

Preexisting Medical Conditions

People with preexisting medical conditions should talk with a doctor before traveling to high altitudes:

- Before their trip, people with heart or lung disease should talk to a doctor who is familiar with high-altitude medicine.

- People with diabetes need to be aware that complications of diabetes may be triggered by altitude illness and may be hard to treat if they are taking medicine for altitude illness.
- Pregnant women can make brief trips to high altitudes, but they should talk with their doctor because some doctors recommend that pregnant women not sleep at altitudes above 12,000 feet.



Page created: April 21, 2013

Page last updated: April 21, 2013

Page last reviewed: April 21, 2013

Content source: Centers for Disease Control and Prevention (<https://www.cdc.gov/>)

National Center for Emerging and Zoonotic Infectious Diseases (NCEZID) (<https://www.cdc.gov/ncezid/index.html>)

Division of Global Migration and Quarantine (DGMQ) (<https://www.cdc.gov/ncezid/dgmq/index.html>)